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Maintenance Notes

The purpose of this manual is to provide guidance to building maintenance personnel with regard to inspection and upkeep of the YKK AP entrance products.

Over the lifetime of an entrance product, it is possible that parts can become damaged. During the active warranty period, the installer of the YKK AP entrances should be contacted if replacement parts are needed. Beyond the warranty period, please contact YKK AP or your local YKK AP representative about obtaining replacement parts.

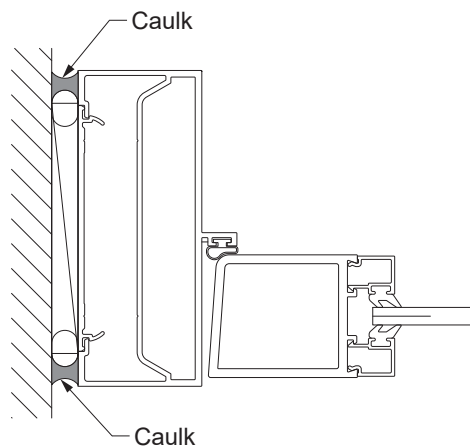
INITIAL INSPECTION

All entrance frames must be installed plumb, level, and square.

Perimeter Caulk Beads

- Frame perimeter caulk beads are required on the interior and exterior of all entrance frames.
- Perimeter caulk beads should be continuous and should be applied in accordance with the sealant manufacturer's application instructions.

See **Detail 1**.

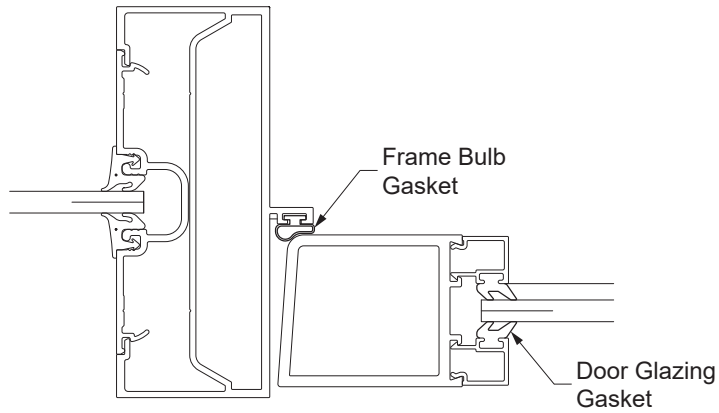
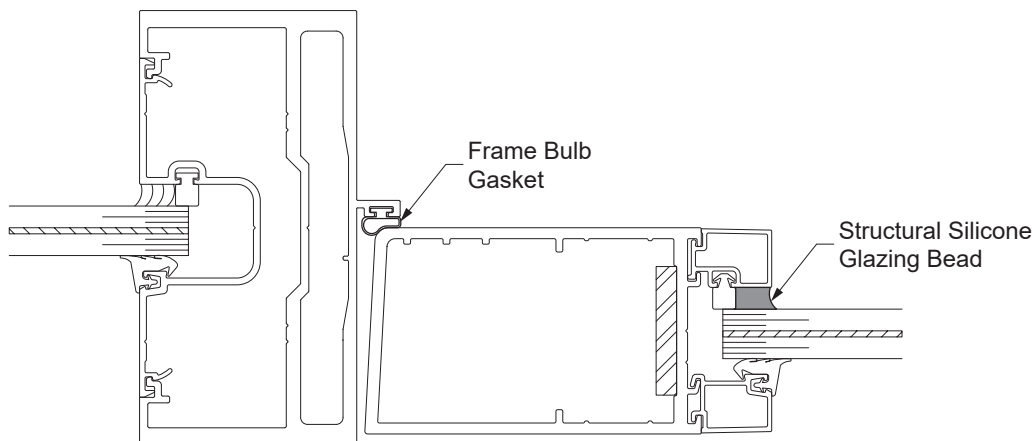


DETAIL 1

Entrance doors should be square and should fit into their frames plumb, level, and square. All hardware should be firmly attached to the frames and doors.

- Frame bulb gaskets should be free from debris to ensure proper sealing of the door to the frame when closed.
- Glazing gaskets or structural silicone beads (depending on the door type) should be continuous and should demonstrate continuous contact or adhesion to the glass and door. Gasket ends should be tightly fit at the corners.

See **Detail 2 & 3** on **Page 2**.

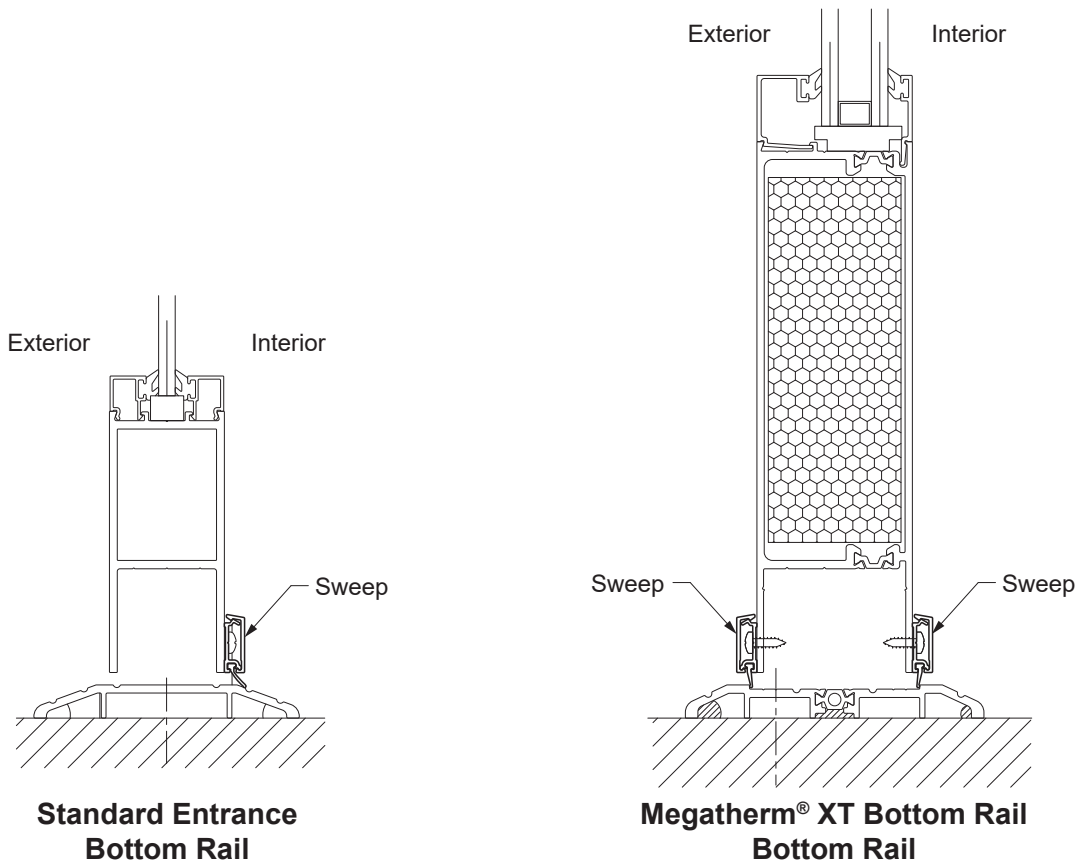
INITIAL INSPECTION (Continued)**Standard Entrance****DETAIL 2****Impact Resistant Entrance
(Wet Glazing Shown)****DETAIL 3**

-Door swing operation should be smooth. Door should not rub against the header/transom or the threshold.

INITIAL INSPECTION (Continued)

Door bottom sweeps (optional on standard entrances) are most effective when installed on the interior side of the door. Sweeps may also be applied to the exterior side of the door. YKK AP Megatherm XT entrances require sweeps to be installed on both the interior and exterior sides of the door.

See **Detail 4**.



DETAIL 4

ROUTINE ALUMINUM CLEANING INSTRUCTIONS

YKK AP architectural aluminum products are provided as specified with either an anodized finish or a fluoropolymer type painted finish. Both finishes are extremely durable, but they do require routine cleaning to protect the finish from damage and to ensure long-term attractiveness.

YKK AP recommends that care and cleaning of its architectural aluminum finishes be performed in accordance with the AAMA 609 & 610 Cleaning and Maintenance Guide for Architecturally Finished Aluminum. YKK AP cannot distribute copies of AAMA documents, so it is recommended that your building maintenance staff obtain a copy of this document from AAMA. AAMA documents can be purchased on the AAMA website at www.aamanet.org.

The amount of contaminant buildup on the aluminum and glass can vary depending on environmental conditions. Frequent rainfall can help lessen the need for cleaning, but marine conditions, pollution, smog, etc. can increase the need for cleaning. The cleaning frequency can be as often as once per month or as little as once per year.

Whenever the glass is cleaned, it is advisable to also clean the aluminum window frames immediately after the glass. Contaminants from the glass cleaning process should not be allowed to damage the aluminum frame finish.

Light surface soil can be removed from anodized or painted finishes with moderate water pressure and mild soaps and detergents.

For heavier soil on anodized finishes, wet the surface then rub the surface with a non-abrasive pad and mild detergent. Always rub with the grain of the anodized aluminum. Follow by rinsing with clean water.

For heavier soil on fluoropolymer type painted finishes, mild solvents such as mineral spirits or mild detergents should be used sparingly with a clean non-abrasive cloth. Follow by rinsing with clean water.

ROUTINE GLASS CLEANING INSTRUCTIONS

Glass cleaning frequency need can also vary with enviromental conditions. It is recommended that aluminum frames should be cleaned immediately after the glass is cleaned.

Uncoated glass surfaces can be cleaned with mild soaps or detergents applied with non-abrasive pads or cloths. The surface should then be rinsed and wiped with a clean commercial squeegee. Care should be taken to not damage the exterior silicone cap bead with tools or abrasives.

If the glass has an exposed coating surface, it should be cleaned in accordance with the glass manufacturer's recommendations.

If plastic infill is used in lieu of glass, it should be cleaned in accordance with the infill manufacturer's recommendations.

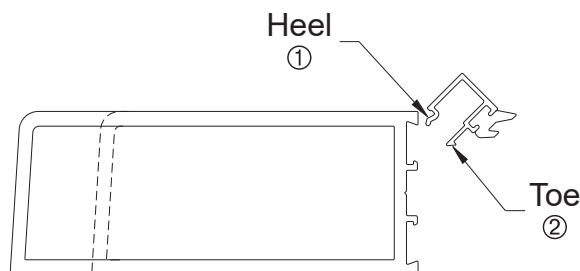
GLASS REMOVAL / REPLACEMENT

If it becomes necessary to replace the lites of glass, the doors can be de-glazed and re-glazed. It is recommended that glass removal and replacement be performed by professionals who are accustomed to handling glass.

Non-Impact Doors

- Working from either the interior or exterior, use a hook tool to remove the door glazing gaskets. Working from the exterior side is usually best so that push bars or panic devices don't have to be removed.
- Once gaskets have been removed, glass stops can be pried off using a firm putty knife or a flat-bladed tool. Remove the vertical glass stops first, and then the horizontal glass stops. After the glass stops have been removed, the glass can be lifted from the door.
- Do not remove the glass setting block or the side blocks from the door.
- Slide the glazing gaskets back into the glass stops.
- Set the new glass onto the setting block.
- Install the vertical glass stops first by engaging the heel of the glass stop first and then rotating the glass stop towards the glass until it snaps into place. It may be necessary to use a soft rubber mallet with a block of wood in order to snap-engage the glass stops. After the vertical glass stops have been applied, the horizontal glass stops can be fitted into place using the same technique.

See **Detail 5**.



DETAIL 5

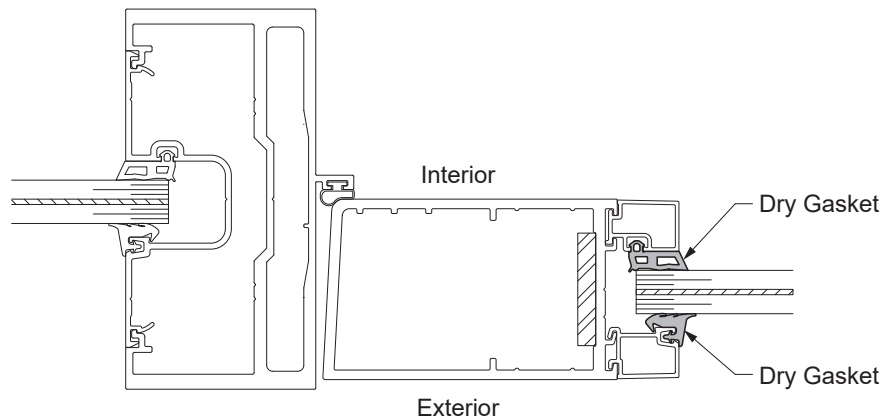
GLASS REMOVAL / REPLACEMENT (Continued)

Impact-Resistant Doors

Impact resistant doors may either be glazed dry with gaskets or possibly glazed with structural silicone, depending on building requirements and specifications. In either condition, gasket and glass stop remove must be performed from the exterior side of the door.

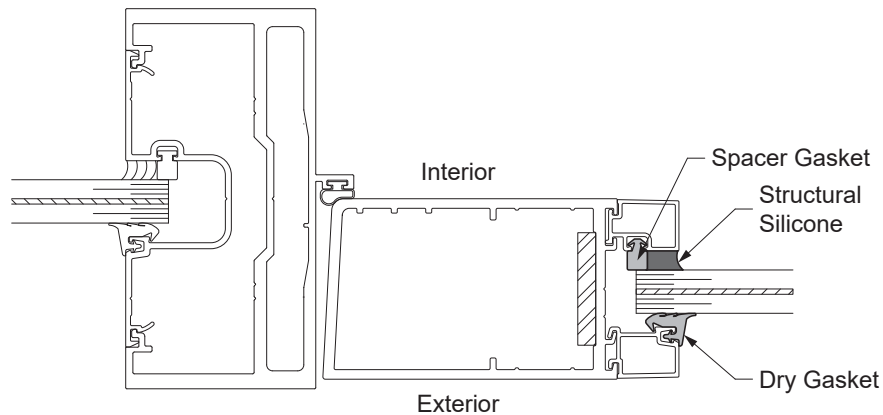
See **Detail 6 & 7.**

Dry Glazing



DETAIL 6

Structural Silicone (Wet) Glazing



DETAIL 7

GLASS REMOVAL / REPLACEMENT (Continued)**Dry-Glazed Impact Doors**

- Using a hook tool, remove the exterior gasket from the door glass stops.
- Once the gasket has been removed, the glass stops can be removed by sliding them towards the glass and then lifting them out.
- After the glass stops have been removed, the glass can be lifted from the door.
- Set the new glass onto the setting block and replace the glass stops.
- After the glass is set and the glass stops replaced, press the gasket into the reglet in the glass stops so that the glass is cushioned from the glass stop by the gasket.

Structurally Glazed Impact Doors

- Using a hook tool, remove the exterior gasket from the door glass stops.
- Using a sharp cutting tool, such as a razor knife, cut the interior structural silicone bead between the glass and the door glass stop. The structural silicone functions as an adhesive to retain the glass, so it must be cut to remove the glass. Do not cut or remove the spacer gasket.
- Once the exterior gasket has been removed and the interior structural silicone has been cut, the exterior glass stops can be removed by sliding them towards the glass and then lifting them out.
- Once the glass has been removed, it is necessary to clean all of the old structural silicone off of the interior glass stops.
- After the glass stops are clean, set the new glass on the setting block and replace the exterior glass stops and gaskets.
- Replace the structural silicone on the interior side. Use Dow-Corning 995 or Tremco ProGlaze SSG. Gun the silicone into the space between the glass, the spacer gasket, and the interior door glass stop and tool the sealant firmly to ensure that the silicone has full contact with the glass and the glass stop.

HARDWARE MAINTENANCE / ADJUSTMENT

If exposed hardware becomes soiled it can be wiped clean using mild soaps or detergents and a soft, non-abrasive cloth pad.

Moving parts do not require lubrication. Lubrication is generally not recommended as many lubricants can trap dirt and debris.

All exposed hardware fasteners should be tight. Fasteners should be inspected at least once per year to ensure they remain tight. If any fasteners become loose, they should be tightened using hand tools such as screw drivers or allen wrenches depending on the fastener type. Aggressive over-tightening can strip the fasteners.

Some hardware adjustment and minor door/frame realignment may be necessary over time even if the doors are initially installed correctly.

YKK AP offers entrances with standard hardware configurations and custom hardware configurations. If your entrances are equipped with custom hardware, please refer to the hardware manufacturer or the hardware manufacturer's literature for adjustment instructions.

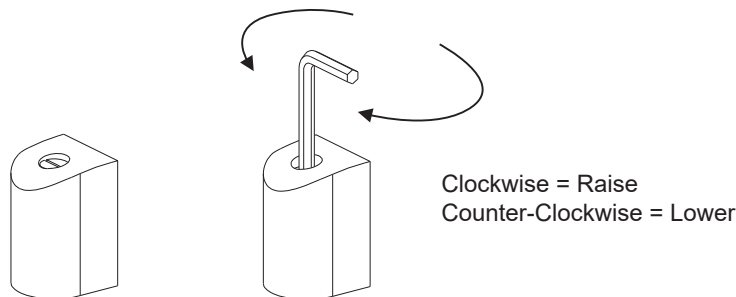
YKK AP standard hardware products provide some manual adjustment capability.

If YKK AP Standard Offset Pivots are used:

The door leaf may be adjusted up and down relative to the door frame using a flat head screw driver and a 3/16" allen wrench.

- Remove the cap screw on the top of the door portion of the bottom pivot with a flat head screw driver.
- You will then be able to raise the door leaf by turning the allen screw clockwise or lower the door leaf by turning the allen screw counter-clockwise.
- After adjustment is complete, replace the cap screw.

See **Detail 8**.



DETAIL 8

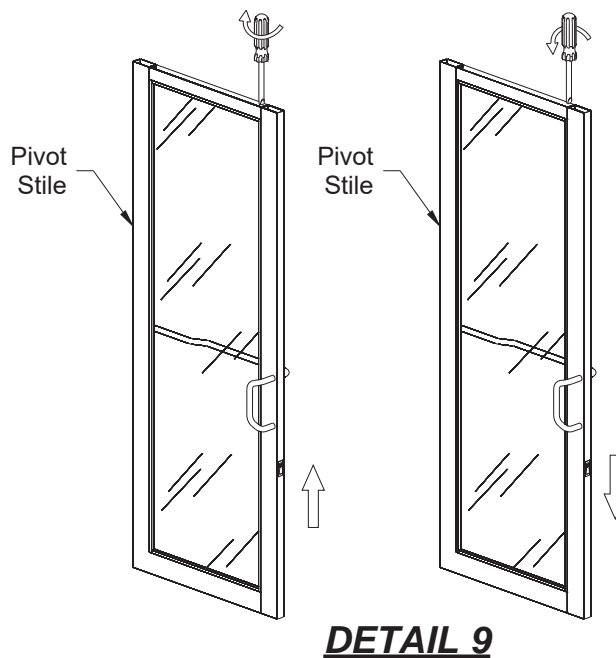
This adjustment is not available with butt hinges or continuous hinges.

HARDWARE MAINTENANCE / ADJUSTMENT (Continued)

The locking stiles of doors may be adjusted up and down relative to the frame no matter what type of hinge hardware is used using a Phillips head screw driver.

- With the door leaf in the open position, you can see a Phillips head fastener in the top rail of the door leaf near the lock stiles.
- Turn the fastener clockwise to raise the lock stile. Caution: over-tightening can lead to glass breakage!
- Turn the fastener counter-clockwise to lower the lock stile.

See **Detail 9**.

**YKK AP Standard Closer Adjustments**

YKK AP concealed and surface mounted closers are all adjustable for sweep speed and latch speed. The surface closers also have an adjustment for backcheck force.

Concealed Closer Adjustments

With the door propped in the open position, you will be able to see 2 adjustment screws in the underside of the door header. The screw closest to the hinge stile is for adjusting the sweep speed. The other screw is for adjusting the latching speed.

The sweep speed adjustment controls the closing speed of the door from the fully open position to within about 15-20 degrees of the closed position. Turning the adjustment screw clockwise slows the sweep speed and turning it counter-clockwise increases the sweep speed.

HARDWARE MAINTENANCE / ADJUSTMENT (Continued)

The latch speed adjustment controls the closing speed of the door for the last 15-20 degrees. It is sometimes necessary to speed up the latch speed in order to properly engage certain locking mechanism. Turning the adjustment screw clockwise slows the latch speed down and turning it counter-clockwise increases the latch speed.

Surface Mounted Closer Adjustments

The closer body will have 3 adjustment screws. They are labeled “BC” (backcheck), “S” (sweep), and “L” (latch).

Backcheck: This feature is intended to provide cushioning for the closer as the door reaches the fully open position. This helps to protect the closer mechanism from wind and also helps prevent the door from opening too far if there is a wall right behind the door. Backcheck force can be increased by turning the BC adjustment screw clockwise. Backcheck force can be decreased by turning the BC adjustment screw counter-clockwise.

Sweep speed can be increased by turning the “S” adjustment screw counter-clockwise and can be decreased by turning the “S” screw clockwise.

Latch speed can be increased by turning the “L” adjustment screw counter-clockwise and can be decreased by turning the “L” screw clockwise.

YKK AP Standard Panic Device Dogging Procedures

YKK AP standard panic devices may be “dogged” open to allow ingress and egress during building open hours and then “undogged” so that the entrance is secure once the door closes. The dogging/undogging procedures are the same whether concealed rod or rim type panic devices are used.

Dogging Procedure (Panic latch is retracted and door is not secure):

- Manually depress the touchbar and maintain pressure on the touchbar.
- Insert dogging key into hole on touchbar.
- Rotate key approximately 1/8 turn clockwise.
- Release touchbar (touchbar will remain depressed to door).

Undogging Procedure (Panic latch locks upon closing):

- Manually depress the touchbar and maintain pressure on the touchbar.
- Insert dogging key into hole on touchbar.
- Rotate key approximately 1/8 turn counter-clockwise.
- Release touchbar (touchbar will extend from door).

Do not operate the dogging device using just the key. You must also manually depress the touchbar when dogging or undogging the device.

If replacement parts are needed, please contact your local YKK AP representative or your local YKK AP distributor for assistance.



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